# **Soil Stories**

# Project Learning Tree Activity #70

# **Program of Studies**

#### Science:

- S-5-SI-1 (Use simple equipment (e.g., plant lights), tools (e.g., rulers, thermometers), skills (e.g., describing), technology (e.g., electronic media), and mathematics in scientific investigations.)
- S-5-SI-2 (Use appropriate equipment (e.g., watches), tools (e.g., rain gauges), techniques (e.g., classifying), technology (e.g., calculators), and mathematics in scientific investigations.)
- S-5-SI-3 (Use evidence (e.g., classifications), logic, and scientific knowledge to develop scientific explanations.)
- S-5-SI-5 (Communicate (e.g., draw, speak) designs, procedures, and results of scientific investigations.)
- S-5-SI-6 (Review and analyze scientific investigations and explanations of other students.)
- S-6-SI-2 (Use appropriate equipment (e.g., binoculars), tools (e.g., beakers), techniques (e.g. ordering), technology (e.g., calculators), and mathematics in scientific investigations.)
- S-6-SI-3 (Use evidence (e.g., orderings, organizations), logic, and scientific knowledge to develop scientific explanations.)
- S-6-SI-5 (Communicate (e.g., speak, write) designs, procedures, and results of scientific investigations.)
- S-6-SI-6 (Review and analyze scientific investigations and explanations of other students.)
- S-7-SI-3 (Use evidence (e.g., measurements), logic, and scientific knowledge to develop scientific explanations.)
- S-7-SI-5 (Communicate (e.g., write) designs, procedures, and results of scientific investigations.)
- S-7-SI-6 (Review and analyze scientific investigations and explanations of other students.)
- S-7-ESS-2 (Demonstrate the rock cycle (e.g., weathered rocks produce soil, weathered rocks are often recrystallized into new rock) and examine characteristics of soils.)

## Social Studies:

• SS-4-G-4 (Understand how humans have interacted with the physical environment to meet their needs in Kentucky and regions in the United States.)

### Math:

- MA-4-NC-12 (Add, subtract, multiply, and divide whole numbers.)
- MA-4-GM9 (Exchange units (e.g., linear, volume, mass) within a measurement system (e.g., 2 feet = 24 inches).)

• MA-5-NC-12 (Explore appropriate estimation procedures.)

### **Core Content**

#### Science:

- SC-M-SI-2 (Use appropriate equipment, tools, techniques, technology, and mathematics to gather, analyze, and interpret scientific data.)
- SC-M-SI-3 (Use evidence (e.g., computer models), logic, and scientific knowledge to develop scientific explanations.)
- SC-M-SI-5 (Communicate (e.g., write, graph) designs, procedures, observations, and results of scientific investigations.)
- SC-M-SI-6 (Review and analyze scientific investigations and explanations of other students.)
- SC-M-2.1.4 (Soil consists of weathered rocks and decomposed organic material from dead plants, animals, fungi, protists, and bacteria. Soils are often found in layers, with each having a different chemical composition and texture.)

## Social Studies:

• SS-E-4.4.2 (People adapt to or modify the environment (e.g., produce food, build shelter, make clothing) to meet their needs).)

#### Math:

- MA-E-1.1.2 (The operations of addition, subtraction, multiplication, and division.)
- MA-E-1.2.5 (Estimate quantities of objects.)
- MA-E-2.2.5 (Use nonstandard and standard units to measure weight, length, perimeter, area (figures that can be divided into rectangular shapes), and angles.)